

What is claimed is:

- 1 1. An encapsulated stator assembly, comprising:
2 a plurality of like laminations stacked in registration with one another, each said
3 lamination contacting at least one adjacent lamination, but said laminations not
4 integrally connected in any way to any other lamination; and
5 a single covering layer partially enclosing and maintaining in registration said
6 plurality of like laminations.
- 1 2. The assembly according to claim 1, wherein each said lamination comprises a
2 stamping, said stamping having an inner diameter with at least one alignment feature,
3 and a plurality of teeth extending radially outwardly from said stamping.
- 1 3. The assembly according to claim 2, wherein said layer comprises at least one collar
2 axially extending therefrom and proximally aligned with said inner diameter.
- 1 4. The assembly according to claim 3, further comprising:
2 a radial transition between said collar and said layer, said radial transition facing
3 away from said inner diameter.
- 1 5. The assembly according to claim 3 further comprising:
2 at least one stand-off post extending from said collar.
- 1 6. The assembly according to claim 2 wherein said layer comprises a creepage wall
2 extending from an outer periphery of said layer.
- 1 7. The assembly according to claim 6 wherein each of said plurality of teeth has an edge
2 projection that collectively form an outer diameter with gaps disposed therebetween
3 and wherein said outer diameter is substantially flush with said creepage wall.
- 1 8. The assembly according to claim 6, wherein said layer further comprises a tooth nub
2 extending axially from said creepage wall at each said edge projection.

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- 1 9. The assembly according to claim 8 wherein each of said plurality of teeth has an edge
2 projection that collectively form an outer diameter, and wherein said tooth nubs
3 project radially inwardly to expose a surface of the lamination that is at the end of said
4 lamination stack.
- 1 10. The assembly according to claim 2, further comprising at least one stand-off post
2 extending from said layer.
- 1 11. The assembly according to claim 10, wherein said at least one stand-off post includes
2 a head that is deflectable for receipt in an appropriate receptacle.
- 1 12. A blower assembly, comprising:
2 a housing having an inlet and an outlet;
3 a fan assembly carried in said housing for drawing air into said inlet and
4 exhausting the air out said outlet;
5 a control circuit board carried by said housing; and
6 a motor assembly for operating said fan assembly, said motor assembly having
7 a rotor assembly coupled with a stator assembly that is partially encapsulated by a
8 covering layer, said covering layer having at least one post extending therefrom that
9 is mountable to said control circuit board.
- 1 13. The assembly according to claim 12, wherein said control circuit board has at least
2 one mounting receptacle.
- 1 14. The assembly according to claim 13, wherein said at least one post has a deflectable
2 member that is securable in said at least one mounting receptacle.
- 1 15. A method for manufacturing an insulated stator, comprising:
2 providing a pair of mold halves with a keyed mandrel extending through said
3 mold halves when closed;
4 stacking a plurality of laminations in registration with each other but unsecured
5 to one another into said mold halves and onto said keyed mandrel;

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6 closing said mold halves onto said plurality of laminations;
7 injecting a polymeric material into said mold halves to dispose a covering layer
8 about said plurality of laminations so as to secure said plurality of laminations to one
9 another while maintaining their registration with one another; and
10 opening said mold halves and ejecting said plurality of laminations with said
11 covering layer.

1 16. The method according to claim 15 further comprising:
2 forming at least one axially extending post from said covering layer during said
3 injecting step.

1 17. The method according to claim 16, further comprising:
2 providing said post with a deflectable member.

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